

REMARKS

Claims 1-43 are pending in the present application. By the present amendment, claims 8, 10, 21, 23, 25, 27, 34, 36 and 41 have been amended, and claim 9 has been cancelled. By previous amendment, claims 1-7, 15-20 and 28-33 have been withdrawn, and claims 11, 24 and 37 have been cancelled.

The examiner has rejected claims 8, 9, 12, 21, 22 and 25 under 35 U.S.C. §102(b) as being anticipate by Auchincloss, U.S. 4,822,512, and rejected claims 8-10, 12-14, 21-23, 25-27, 34-36 and 38-43 under 35 U.S.C. §103(a) as being unpatentable over the same patent. Auchincloss is a patent directed to a biocidal composition which can be used in the farming industry, and which particularly resists chlorine generation in the approved dilutions as well as in conditions in which only a small amount of water is present. The patentee in this patent recites that such conditions may occur in farm use “where water may be split [*sic*] on the composition or instructions for making the composition up may not be followed, so that concentrated solutions are generated.” (See Column 2, Lines 11-15). The composition is intended to improve upon biocidal compositions which have historically acted through chlorine/hypochlorite generation. Generally, the composition as disclosed in Auchincloss comprises potassium persulfate, sulphamic acid, malic acid, sodium chloride and sodium hexametaphosphate. Importantly, the pH of the composition is maintained as low as possible in order to resist the generation of chlorine/hypochlorite, and in most examples is stated as being at or about 2.4 pH; however, there are some broad disclosures regarding a possible scope of up to 5.5 pH.

The applicant has amended the claims of the present application to distinguish the subject invention over Auchincloss, as hereinafter described.

Auchincloss describes the use of an alkali metal phosphate buffer in his composition, specifically as stated in column 2, lines 39-41 (“This results because of the buffering and chelating effect of the alkali metal phosphate.”); column 3, lines 9-12 (“The phosphates act as buffering and chelating agents, in combination with the flat pH curve of sulphamic acid, and enable the composition to be effective over a wide range of in-use conditions...); and column 3, lines 37-44 (“The presence of the phosphate in the composition contributes to the extended useful life of the aqueous preparation. The phosphate improves the effectiveness of the composition when dissolved in hard water. The phosphate causes sequestration of any metallic ions which might cause rapid decomposition of the oxidizing agents present in this solution.”). The first series of claims in the present application (claims 8, 10 and 12-14) limit the buffer of the composition to be selected from the group consisting of alkali metal salt forms of carbonate and bicarbonate, which are neither described nor enabled in the Auchincloss reference, and therefore distinguish this claimed invention over the prior art. The fourth series of claims in the present application (claims 41-43) similarly limit the buffer of the composition, and are therefore also distinguishable over the prior art.

Auchincloss further describes a composition having up to 1.5 parts sodium chloride (see column 3, lines 60-67). In what is described as a “very severe test” of the composition regarding chlorine evolution, a paste of the composition (described in column 7, lines 13-38) can have up to a concentration of 2.5% sodium chloride, while only showing marginal chlorine evolution; presumably, any amount of sodium chloride or other halide in excess of 2.5% is undesirable for purposes of the Auchincloss composition. Furthermore, in light of the low pH of the

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Auchincloss composition and the inclusion of sulphamic acid, the same does not generate hypochlorite (see column 2, lines 5-15). The second series claims (claims 21-23 and 25-27) limit the concentration range of halides to a range of 3-40%, and further require the generation of hypochlorite species in solution; as such they are outside of the scope of Auchincloss.

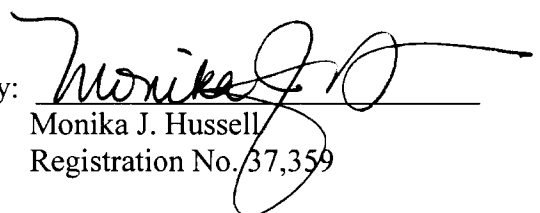
Finally, the pH of the composition described in Auchincloss ranges from 1.2 - 5.5 (See Abstract and column 2, lines 30-31). The third series of claims presented by this Amendment (claims 34-36 and 38-40) requires that the buffer bring the composition to a pH in the range of about 6 to about 10, outside the range of Auchincloss.

In view of the claim amendments and comments, the applicant believes that each and every issue raised by the examiner under this rejection has been addressed and overcome. Applicant respectfully submits that the present application is in condition for allowance. The examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

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